

Building and Safety 760.202.9253

## PHOTOVOLTAIC SOLAR PLAN SUBMITTAL REQUIREMENTS

2010 California Electrical Code

Information shall include documentation for Panels, Inverters and Support system.

# Include the following documentation NOTE: HOA LETTER MUST ACCOMPANY SUBMITTAL

- PLANNING DEPARTMENT APPROVAL STAMP AT TIME OF SUBMITTAL
  For approvals requiring "screening" complete details for screening shall be included on approved plans
- Two complete sets of signed plans shall be submitted
- Include cut sheets for all equipment (panels, inverters, disconnect, etc.)
- Actual valuation of installation before any rebates or credits
- Permit fee is due at submittal, average fee is \$342.55 (add \$122.50 for service upgrade)
- Approved method of flashing all penetrations CRC 903.2, 905.2.8.1, 905.3.8
  Note: "Tile Track" is not recognized by code, nor are liquid sealants in lieu of approved flashings
- Approved method of support with documentation with wet signed engineering calculations for 85 mph,
  exposure "C" and the seismic zone for location of installation. Include the support span dimensions.

#### Provide complete Single Line Drawing and detail the following:

- 1. Main service size in amps, list size of any sub-panels used, INCLUDE A PHOTO OF THE SERVICE
- 2. Size of back fed breaker in amps. (See CEC 690.64 (B) (2)
- 3. Quantity of panels per string, strings per inverter, inverters per system.
- 4. Over current requirement of the panels used and the over current device(s) installed.
- 5. List output voltage on D/C conductors from strings and combiner boxes to D/C disconnect
- 6. List type, temperature rating and size of all conductors. Design temperature is 111 degrees F.
- 7. Include conductor correction factor for all roof mounted raceways per. CEC 315.15 (B) (2) (c)

#### List Location of all equipment installed:

- 1. Show location of conduit runs on roof.
- Show location of combiner boxes at end of each string and list fuse size if any.
- 3. Show location of A/C and D/C disconnects,
  - Note: Point of Connection Disconnect must be readily accessible 690.17
- 4. Detail panel bonding, how you will bond each panel and the complete system.
- 5. Show location of inverters and any new panel boards installed (sub-panels)

### **Safeguards**

- 1. All interconnections between PV panels must be permanently secured and protected against damage (CEC 300.4) No loose conductors hanging under panels.
- 2. All connections between strings must be in metal conduit (CEC 300.3, 352.12 C, D 350.12 1, 2)
- 3. Roofing materials damaged by installation shall be replaced.
- 4. All panels and equipment shall have required clearances, and be accessible for service.
- 5. Labeling shall be per. CEC; 690.5(C), 690.7(E), 690.9(C), 690.17(4), 690.35(F) 690.64(B) (7)